

cyclosporine-induced hypertension. Fifteen (15) patients received treatment with amlodipine while 14 received treatment with other antihypertensives, primarily beta blockers ( $n=11$ ). A significant difference was not found in the primary or secondary endpoints, which assessed safety and efficacy between the treatment groups. Significant differences were found between those with and those without cyclosporine-induced hypertension. Patients with cyclosporine-induced hypertension had a longer mean length of stay, 35.4 days (18–109) as compared to 24.1 days (7–74). Zero of the 9 patients who received amlodipine prior to and during the BMT admission went on to experience cyclosporine-induced hypertension. Available results, although not robust, suggest that safety and efficacy are similar in allogeneic BMT patients whether they receive amlodipine or another antihypertensive to treat cyclosporine-induced hypertension. However, the data provided did identify that those patients receiving amlodipine prior to and during their bone marrow transplant were less likely to experience cyclosporine-induced hypertension.

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### Evaluation of Post-Transplant Iron Chelation Therapy in Allogeneic Hematopoietic Stem Cell Transplant

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**Background:** Peri-transplant iron overload (IOL) has been associated with increased non-relapse morbidity and mortality in patients receiving hematopoietic stem cell transplant (HSCT). Iron chelation therapy (ICT) with deferoxamine or deferasirox, and phlebotomy remain the major therapeutic options for reducing IOL in HSCT recipients, though the role of ICT in these patients, particularly in the post-transplant period, has not been clearly defined. The aim of this study was to evaluate the impact of post-transplant ICT on outcomes up to day +100 in allogeneic HSCT, and to assess the tolerability of post-transplant ICT.

**Methods:** A retrospective medical record review of 29 patients who underwent allogeneic HSCT from March 2009 to October 2011 at a 779-licensed bed, urban academic medical center was conducted. Inclusion criteria were age  $\geq 18$  years and serum ferritin level  $\geq 1000$  ng/mL within 3 months prior to transplant. Exclusion criteria were mismatched or cord blood transplant, and ICT initiated in the pre-transplant period or after day +50. Patients were divided into 2 groups: those who received  $\geq 1$  dose of deferoxamine or deferasirox post-transplant up to day +50 (ICT group), and those who had never received ICT (non-ICT group). The primary endpoint was clinically significant liver dysfunction up to day +100.

**Results:** Of the 29 patients evaluated, 22 were in the non-ICT group and 7 in the ICT group (6 received deferoxamine 1000 mg IV daily, 1 received deferasirox 2000 mg orally daily; median duration of ICT, 24 days). There were no statistically significant differences between the groups in demographic or transplant characteristics, though there was a longer median time from diagnosis to transplant (417 vs. 238 days,  $P = .37$ ) and a higher median pre-transplant ferritin level (2910 vs. 1673 ng/mL,  $P = .38$ ) in the ICT group compared to the non-ICT group. Four patients experienced clinically significant liver dysfunction, with 3 patients (13.6%) in the non-ICT group and 1

patient (14.3%) in the ICT group ( $P = .99$ ). There were no significant differences in other post-transplant outcomes evaluated, including change in ferritin level, bloodstream infection, and death. Of the 7 ICT patients, 71.4% experienced acute kidney injury that required interruption or discontinuation of ICT.

**Conclusions:** ICT in the immediate post-transplant period did not improve post-transplant outcomes and was not well tolerated. Alternative strategies for the administration of pre- or peri-transplant ICT in HSCT recipients are recommended.

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### Linezolid Use Early After Stem Cell Transplant - A Cautionary Tale

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**Background:** Linezolid (LZ) is an oxazolidinone antimicrobial often used to treat resistant gram-positive bacteria and has been associated with mild, reversible, time-dependent myelosuppression, including thrombocytopenia (common), anemia (common), leukopenia, and pancytopenia. Generally, these effects occur with treatment durations of  $\geq 14$  days. Patients with underlying hematologic abnormalities may be more at risk for the development of LZ-induced myelosuppression, but this is controversial. We hypothesized that LZ use before engraftment may delay hematopoietic recovery following stem cell transplant (SCT), and performed a matched controlled analysis to investigate this hypothesis.

**Methods:** With institutional review board approval, we retrospectively evaluated 24 patients who received LZ and compared them to 60 controls who did not receive LZ from 1/1/1997 to 1/1/2010. Our SCT database was utilized to find matched controls and matching was based on: diagnosis; transplant type; cell source; transplant conditioning regimen; and age  $\pm 10$  years. Patients in the LZ group were included if LZ was administered at any time from day 0 through engraftment of white cells but for a minimum of 72 consecutive hours. Patients 1 year of age or older were included. The data were analyzed for the effects of LZ on time to neutrophil (ANC  $> 500$  for 3 days) and platelet engraftment (platelet count  $> 20,000$  for 7 days without transfusion), and the cumulative incidence of engraftment of both neutrophil and platelets within the first 100 days post-transplant.

**Results:** The LZ and control groups were similar with respect to age (median 44 vs. 41 years), gender (50% vs. 58% male and 50% vs. 42% female), diagnosis (29% vs. 25% had AML/MDS), cell source (67% vs. 63% apheresis product), transplant type (67% vs. 63% allogeneic), ablative vs. non-ablative conditioning (79% vs. 83% myeloablative), and cell dose (median CD34 dose  $4.52 \times 10^6/\text{kg}$  vs.  $4.34 \times 10^6/\text{kg}$ ). Median time to neutrophil engraftment was the same for LZ and control groups (12 days). The median time to neutrophil plus platelet engraftment for LZ group and control group was 50 days (11 patients censored) vs. 15.5 days (10 patients censored). Neutrophil engraftment failure occurred